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### Feature Article - The Economic Importance of Sport and Recreation

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#### INTRODUCTION

This article examines the statistical information, mainly from the ABS, that is relevant to the measurement of the economic importance of sport and recreation in Australia. ABS industry data are collected using the Australian Standard Industrial Classification (ASIC). Sport and recreation are not classified as separate industries within ASIC, but cover a range of activities from several different industries. The scope of sport and recreation for the purpose of this article includes many of the activities which people undertake for leisure, as well as the related activities of, for example, the entertainment, manufacturing, wholesale, retail and service industries.

#### ECONOMIC BENEFITS

The economic importance of sport and recreation can be examined by analysing the actual expenditure on sport and recreation activities by individuals and by government, as well as the size of the industry as reflected by employment, participation and goods and services produced and sold. Economic benefits explored below include household and government expenditure, employment and industry information, imports, exports and production, and participation statistics.

Potential indirect economic benefits, such as less demand on health and welfare services which could result from involvement in sport and recreation activities, are not covered by this article.

#### Expenditure information

Information on expenditure can be used directly to measure the economic importance of sport and recreation.

**Household expenditure:** The ABS Household Expenditure Survey (HES) provides information on how much households spend on a range of items. Results from the last HES show that in 1988-89 Australian households spent on average \$60 per week on items classified as "recreation", comprising 12 per cent of their total expenditure. Expenditure on recreation is compared to other categories of expenditure in Table 1. A detailed breakdown of recreation expenditure is given in Table 2. Note that the averages in both Tables 1 and 2 are over all households, including those which had no expenditure on these items.

**TABLE 1. AVERAGE WEEKLY HOUSEHOLD EXPENDITURE, AUSTRALIA, 1988-89**  
**All households**

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<b>Expenditure</b>	<b>Amount (\$)</b>	<b>Per cent</b>
Current housing costs	71.8	14.3
Fuel/power	12.9	2.6
Food/non-alcoholic beverages	95.8	19.1
Alcoholic beverages	16.9	3.4
Tobacco	6.9	1.4
Clothing/footwear	30.7	6.1
Household items	37.4	7.4
Household services	24.1	4.8
Health expenses	21.7	4.3
Transport	76.1	15.1
Recreation	59.4	11.8
Personal care	10.0	2.0
Other	39.1	7.8
<b>Total</b>	<b>502.7</b>	<b>100.0</b>

Source: ABS Household Expenditure Survey 1988-89, States and Territories (6533.0)

**TABLE 2. AVERAGE WEEKLY HOUSEHOLD EXPENDITURE, RECREATION, AUSTRALIA, 1988-89**  
**All households**

<b>Recreational item</b>	<b>Amount (\$)</b>	<b>Per cent</b>
Television and other audio-visual equipment	9.2	15.5
Books, newspapers, magazines and other printed material	5.8	9.8
Other recreational equipment (eg photographic, musical, sporting goods, toys, etc)	8.2	13.7
Gambling	3.6	6.0
Entertainment and other recreational services (eg sports lessons, memberships, entrance fees)	12.1	20.4
Animal expenses	4.5	7.5
Holidays in Australia	9.6	16.1
Holidays overseas	6.5	10.9
<b>Total</b>	<b>59.4</b>	<b>100.0</b>

#### **SELECTED SPORTS RELATED EXPENDITURE**

<b>Item</b>	<b>Amount (\$)</b>
Sports equipment	1.98
Repair of sports/recreational equipment	0.19
Health and fitness studios	0.55
Sporting clubs subscriptions	0.75
Green fees	0.24
Sports equipment hire	0.05
Sports services charges	1.05
Spectator admission fees to sport	0.49

Source: ABS Household Expenditure Survey 1988-89, Australia, Detailed Expenditure Items (cat. no. 6535.0).

Tables 1 and 2 include only expenditure that is directly classified as recreation. It could be argued that there is other expenditure that should be included as recreational expenditure. For example, the car and petrol usage in travelling to a recreational activity, the food and drink that is bought

while participating in a recreational activity, clothing that is purchased, and so on. These other related expenditures were considered in a study undertaken by the former federal Department of the Arts, Sport, the Environment, Tourism and Territories (DASETT) based on the 1984 HES. The results have been published in DASETT Technical Paper no 1, The Economic Importance of Sport and Recreation - Household Expenditure. This study determined that the average annual expenditure in 1984 on sport and recreation by Australian households was between \$3,900 and \$4,700. This made a total expenditure of between \$19.8 and \$23.7 billion nationally and contributed between 8.6 and 10.1 per cent of GDP and between 9.2 and 10.6 per cent of employment.

**Government expenditure:** Table 3 gives some preliminary estimates of government expenditure on recreation. This information shows that \$1,786m was spent by all levels of government on recreation facilities and services in 1990/91. Information is also available from the ABS at an individual state and territory level for Local Government expenditure.

**TABLE 3. GOVERNMENT OUTLAYS ON RECREATIONAL FACILITIES AND SERVICES, \$ MILLION**

Level of government	1986-87	1987-88	1988-89	1989-90	1990-91
Commonwealth	111	91	51	72	92
State/Territory Total	680	723	828	964	966
New South Wales	216	225	212	260	256
Victoria	168	205	280	313	273
Queensland	95	103	126	95	137
South Australia	61	67	64	102	116
Western Australia	70	65	68	67	61
Tasmania	38	27	39	32	36
Northern Territory	34	32	39	38	41
Australian Capital	na	na	na	56	46
State/Territory and local combined	1348	1449	1594	1744	1717
<b>Commonwealth, State/Territory and local combined</b>	<b>1449</b>	<b>1540</b>	<b>1642</b>	<b>1805</b>	<b>1786</b>

It is not possible to add across the different levels of government as all financial transactions between the different levels are removed from the totals.

Source: Unpublished ABS Government Finance data.

## Employment and industry information

Employment and industry information can help measure the economic significance of sport and recreation. The contribution of unpaid volunteer work is especially significant.

**Employment:** The Censuses of Population and Housing provide information on employment in sport and recreation related industries. Table 4 shows data from the 1986 Census on the numbers of people employed in certain sport and recreation related industries. Note that many people involved in sport and recreation are not covered by this data (for example, medical sports specialists, federal, state and local government employees in the sport and recreation field, and those involved with other support services for sport and recreation activities).

**TABLE 4. PERSONS EMPLOYED IN THE SPORT AND RECREATION INDUSTRIES, AUSTRALIA, JUNE 1986**

Industry	Persons
Sport equipment manufacturing	1,763

Sport and toy wholesalers	3,753
Sport and toy stores	11,456
Motion picture production, hire, theatres	8,695
Radio and TV stations	18,484
Live theatre, orchestras, bands	5,784
Creative arts	4,875
Other entertainment	8,894
Parks and gardens	6,611
Gambling and lotteries	15,726
Other sport and recreation	29,531
Restaurants, hotels and accommodation	176,729
Clubs	35,999

Source: ABS 1986 Census of Population and Housing, Table CX0056

Information from the 1991 Census is becoming progressively available, and national detailed industry tables will be released in September 1993. Information relevant to sports equipment manufacturing and sport and toy stores (such as number of establishments, employment, wages and salary and turnover) is also available from the Manufacturing and Retail Censuses, respectively (cat. nos. 8202.0 and 8622.0).

The ABS also publishes information on the labour force on a more regular basis. Occupation and industry information is collected quarterly from ABS household surveys and published in aggregate categories. Table 5 contains labour force data for some sport and recreation related industries.

**TABLE 5. PERSONS EMPLOYED IN THE SPORT AND RECREATION INDUSTRIES, AUSTRALIA, NOVEMBER 1992**

Industry	Males	Females
Sport and recreation	26,600	29,200
Entertainment	24,400	25,300
<b>Total entertainment and recreational services</b>	<b>51,000</b>	<b>54,500</b>
Restaurants, hotels and accommodation	102,300	138,800
Clubs	28,200	30,200
<b>Total restaurants, hotels and clubs</b>	<b>130,600</b>	<b>168,900</b>
<b>TOTAL SPORT AND RECREATION</b>	<b>181,600</b>	<b>223,400</b>

Note: Totals may not be exactly the sum of components due to rounding.

Source: ABS Labour Force Survey, unpublished data, November 1992.

It is important to note that both the Census and the labour force information only report people's main jobs. There are a number of people who are employed in the sport and recreation industry as a second job. The ABS conducted a survey in March 1993, as a supplement to the labour force household survey, that collected information on paid and unpaid work in a number of the arts, and also had some related questions on involvement with sport. Results will be available later in the year.

**Industry:** Table 6 contains data from the ABS Business Register on the number of businesses engaged in certain sport and recreation activities.

The data in Table 6 are classified by ASIC. As mentioned earlier in this article, sport and recreation include activities classified to several ASIC industries, making measurement of

employment difficult.

**TABLE 6. NUMBER OF BUSINESS ESTABLISHMENTS BY INDUSTRY AND EMPLOYMENT SIZE, AUSTRALIA, AUGUST 1992**

Industry	<5	5-9	10-19	20+	Total
Sporting equipment manufacturers	169	59	28	15	271
Sport and toy wholesalers	679	192	72	33	976
Sport and toy retailers	2,889	572	109	15	3,585
Radio and TV stations	341	79	89	173	682
Live theatre, orchestras and bands	615	178	92	102	987
Creative arts	892	58	17	8	975
Other entertainment nec	1,226	315	166	110	1,817
Parks and gardens	328	150	88	88	654
Lotteries and gambling	1,876	875	262	98	3,111
Other sport and recreation services	4,494	1,257	718	516	6,985
Cafes and restaurants	7,314	5,346	2,153	1,241	16,054
Hotels	1,513	1,730	1,296	1,179	5,718
Accommodation	4,417	1,803	865	807	7,892
Licensed bowling clubs	638	330	138	51	1,157
Licensed golf clubs	298	178	140	83	699
Other licensed clubs	992	551	386	533	2,415
Non-licensed clubs	472	110	72	69	723
<b>Total</b>	<b>29,153</b>	<b>14,783</b>	<b>6,691</b>	<b>5,074</b>	<b>54,701</b>

Source: ABS Business Register, August 1992.

In an attempt to make a more complete measure of employment in sport and recreation, DASETT employed a consultant to undertake research into the sport, recreation and fitness sector. A model was developed for the sport, recreation and fitness sector and results of a survey undertaken by the consultant indicated that there were more than 20,000 establishments in the sector employing in total in excess of 280,000 people Australia-wide. Details of the results of the research are available in the Department of the Arts, Sport, the Environment and Territories (DASET) Technical Paper No. 6, Economic and Employment Characteristics of the Australian Sport, Recreation and Fitness Industries.

The above study has helped highlight the need for the development of an appropriate statistical framework for the sector. DASET are now funding research to develop the recreation and sport component of the culture/leisure industry framework established by the Statistical Advisory Group (SAG) of the national Cultural Ministers' Council, which is made up of the Federal and State Government Ministers responsible for cultural portfolios. The ABS is involved with SAG through the National Culture/Leisure Statistics Unit.

**Imports/exports and production:** In examining the impact of sport and recreation with respect to manufacturing and production, it is useful to examine ABS data on goods imported to and

exported from Australia. Table 7 contains data on foreign trade activity for Australia and shows that, for the selected commodities, the value of goods imported far exceeds the value of those exported. Details of production of some recreational equipment are available in the ABS publication Manufacturing Commodities : Principal Articles Produced (cat. no. 8303.0).

**TABLE 7. FOREIGN TRADE ON SELECTED COMMODITIES, AUSTRALIA, 1992**

Commodity	Exports (\$'000)	Imports (\$'000)
Snow-skis	26	4,086
Sailboards	250	2,103
Golf clubs	2,122	3,251
Lawn tennis racquets	177	12,417
Fishing rods	168	9,024
Ice skates and roller skates	303	21,821
General athletic/exercise equipment	2,326	41,251

Source: ABS Foreign Trade FASTTRACS System.

**Voluntary activity:** Voluntary activity is a very important aspect of sport and recreation which impacts both on employment in the industry and on the cost to households participating in sport and recreation. The contribution of unpaid work falls outside the production boundary used to define the activities measured by ABS economic surveys and censuses. This is mainly because of the difficulty of assigning a market value to these activities. Experimental estimates of the value of volunteer and community work have been made by the ABS and other organisations.

Surveys on voluntary activity were conducted by the ABS in 1982 in Victoria and Queensland, and in 1988 in South Australia. Voluntary activity has also been covered by the national ABS Time Use Survey, conducted during 1992.

The 1982 data were used by DASETT, in Technical Paper No. 3, The Economic Impact of Sport and Recreation - The Voluntary Sector, to extrapolate the information on sport and recreation volunteers to the Australia level at June 1987 and to calculate the cost for households if voluntary work had to be paid for.

Results indicated that a total of 3.6 million people provided some 436.4 million hours of voluntary work in Australia. Volunteers in sport and recreation organisations accounted for just over 40 per cent (1.45 million) of all volunteers, while their work amounted to almost 38 per cent of all voluntary hours worked.

It was estimated that the labour cost equivalent of the voluntary work in sport and recreation amounted to approximately \$1.7 billion in 1986-87. Calculations based on labour force information show that this cost was roughly equivalent to the labour cost of the paid workforce in the sport and recreation industry. Further analysis indicated that the voluntary work, if paid for, would lead to an increase in the cost of sport and recreation for each household of about \$330 per annum.

Experimental estimates of total volunteer and community work have been made, and have been published in the ABS information paper Measuring Unpaid Household Work : Issues and Experimental Estimates (cat. no. 5236.0). The information paper contains an informative discussion of the issues involved in the valuation of unpaid work.

### Participation information

Information on participation can be used to indicate the importance of sport and recreation to

people's lives and, given the extent of people's involvement, support the status of sport and recreation as making a major economic contribution to the community.

**Sports participation:** In 1989 the ABS conducted a sports participation survey for Victoria. It showed that at some time during that year, about 42 per cent of Victorians aged 15 years and over participated in a sporting activity (51 per cent of men and 33 per cent of women). The 10 most popular sports are shown in Table 8. In terms of sports played at least once a week, tennis was the most popular (6.1 per cent), followed by netball (4.1 per cent) and golf (3.8 per cent). Information is also available on the demographic profile of participants, the costs of participation, spectator information and reasons for non-participation.

**TABLE 8. SPORTS MOST FREQUENTLY PARTICIPATED IN, VICTORIA, 1989**

Sport	Per cent
Golf	11.0
Tennis	10.2
Squash	5.7
Netball	4.8
Basketball	4.2
Ten pin bowling	4.2
Australian Rules Football	4.0
Billiards/snooker/pool	3.8
Indoor cricket	3.3
Cricket	3.3

Source: ABS Sports Participation Survey, Victoria, October 1989 (cat. no. 4118.2).

A survey that collected information on people's sport and recreation activity was conducted in the Northern Territory in 1991. This covered a wider spectrum of activities than the Victorian survey and showed that walking (33 per cent), swimming (27 per cent) and cycling (24 per cent) were the most popular activities.

Participation data are also available from a number of other sources. These are detailed in the ABS publication *A Guide to Australian Social Statistics* (cat. no. 4160.0), edition no. 5 of *Sports Economics*, published by The Centre for South Australian Economic Studies, at the University of Adelaide, and in *Sport and the Quality of Life*, published by the Australian Sports Commission.

**Culture/leisure:** The ABS has conducted a national survey that collected information on people's attendance at cultural activities during the previous year. Attendance rates for various activities are shown in Table 9, which indicates that libraries were the most popular venue, followed by museums. Further data on the number of performances and attendance at music and performing arts events are being collected and the results are due for release in mid 1993 as *Music and Performing Arts, Australia, 1991* (cat. no. 4116.0).

**TABLE 9. ATTENDANCE AT CULTURAL VENUES/ACTIVITIES, AUSTRALIA, 1991**

Venue/activity	Participation rate (per cent)
Library	36.7
Museum	30.0
Popular music concert	28.6
Art Gallery	23.9
Musical theatre performance	20.1
Other theatre performance	17.8

Dance performance	11.2
Classical music performance	8.2

Source: ABS Attendance at Selected Cultural Venues, June 1991 (cat. no. 4114.0).

**Arts and crafts:** A recent ABS survey in Western Australia showed that during a 6 month period over 38 per cent of adults participated in art/craft as a leisure activity and over 57 per cent of households had purchased a finished art or craft product. Participation rates for the activities reported are shown in Table 10.

**TABLE 10. ACTIVITIES OF PERSONS PARTICIPATING IN ART/CRAFT, WESTERN AUSTRALIA, 1990**

Activity	Participation rate (per cent)
Handicrafts	52.4
Photography	19.7
Music making	18.6
Drawing/painting/sculpting	15.8
Writing	8.7
Other	10.2

Source: ABS Arts and crafts: Purchasing and Participation Survey, Western Australia, October 1990 (cat. no. 4111.5).

**Leisure:** Participation information can be supplemented by examining the way people spend their time. During 1987 the ABS undertook a pilot Time Use Survey in Sydney. Results from the survey show that on average a person spent 43 minutes a day on active leisure and 191 minutes on passive leisure, which amounted to approximately 25 per cent of a person's waking day. Some results are shown in Table 11.

**TABLE 11. AVERAGE DAILY TIME SPENT ON ACTIVITIES, SYDNEY, 1987**

Activity	Time (minutes)	Proportion of waking day*
Labour Force	223	24.1
Domestic activities	137	14.8
Child care/minding	32	3.5
Purchasing goods and services	40	4.3
Sleeping	513	na
Eating and personal care	128	13.8
Education	39	4.2
Volunteer work	16	1.7
Social/entertainment	78	8.4
Active leisure	43	4.6
- sport/exercise	18	1.9
- hobbies	10	1.1
Passive leisure	191	20.6
* based on 927 minute waking day		

Source: ABS Time Use Pilot Survey, Sydney, 1987 (cat. no. 4111.1).

As previously mentioned, during 1992 the ABS undertook a national Time Use Survey. Results are expected towards the end of 1993, and there will be more detail available on the type of leisure activities undertaken.



## **Population data**

The ABS produces population and demographic information which can be used when examining the economic impact of sport and recreation on different groups in the community. For example, data from the Population Census can give details of the population distribution for different age groups, which can be useful when planning the location of recreational services and thus ensuring the best economic return for that service. The ABS publishes yearly population estimates for local government areas; both totals and age by sex distributions.

## **Major events**

One area that has not been covered by this article is the economic impact of major events, which may contribute to the economic importance of sport and recreation. Examples include the Formula One Grand Prix in Adelaide, the Australian Open Tennis Championships, and the staging of Commonwealth and Olympic Games.

A range of economic impact studies have been undertaken for a variety of events around Australia. Some of these have been reviewed in the newsletter, Sports Economics, published by The Centre for South Australian Economic Studies.

## **NATIONAL CULTURE/LEISURE STATISTICS UNIT**

The ABS has a National Centre for Culture and Recreation Statistics located in its Adelaide Office. The role of the Unit is to assist in the development of a framework for culture/leisure statistics, to coordinate statistical activity, and to participate in relevant research. Work so far in the Unit has been mainly in the arts/culture area, but it is anticipated that this will expand into the sport and recreation sector. For further information contact The Director, National Centre for Culture and Recreation Statistics, on (08) 8237 7402.

## **CONCLUSION**

An article of this nature can only touch upon the range of issues associated with the economic benefits of sport and recreation. The emphasis of this article has been to introduce the array of information available which can be used to support the economic worth of this sector. There is considerable room, however, for further information and research in this field and the ABS is available to work with the sport and recreation sector to increase the level of knowledge.

## **ABOUT THE AUTHOR**

This feature article was contributed by Carol Soloff who was Assistant Director of Statistical Consultancy in the Victorian Office of the ABS at the time she wrote the article. Carol had previously spent six months with the former Victorian Department of Sport and Recreation working on issues related to the economic benefits of sport and recreation.

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